IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for improving the brilliance of color and the stability of a colored polymer system, which is composed of a matrix and of discrete polymer particles distributed in accordance with a defined spatial lattice structure in the matrix, and which is obtained by filming of an emulsion polymer with core/shell structure, which comprises

- ~~using~~ utilizing an emulsion polymer ~~obtainable~~ obtained by
- polymerizing monomers in at least one first stage (core monomers),
- then polymerizing monomers in at least one further, second stage (transition stage), and
- finally polymerizing monomers in a third stage (shell monomers),

where, based on the percentage constitution of the monomer mixtures of the three stages, at most 30% by weight of the monomers of the first stage are identical with those of the third stage, and 5% of the monomers of the second stage are identical with, respectively, those of the first and those of the third stage, and not more than 60% by weight of the monomers of the 2nd stage here are monomers absent in the 1st stage and also absent in the 3rd stage.

Claim 2 (Currently Amended): [[A]] The process as claimed in claim 1, wherein the polymer particles of the colored polymer system comprise one or more types of particle with a median particle diameter in the range from 0.05 to 5 μm, where, however, each type of particle has a polydispersity index (PI) smaller than 0.6, calculated from the formula

$$PI = (D_{90}-D_{10})/D_{50}$$

where D_{90}, D_{10}, and D_{50} are particle diameters for which the following apply:

D_{90}: 90% by weight of the total weight of all of the particles have a particle diameter smaller than or equal to D_{90}

D_{50}: 50% by weight of the total weight of all of the particles have a particle diameter smaller than or equal to D_{50}

D_{10}: 10% by weight of the total weight of all of the particles have a particle diameter smaller than or equal to D_{10}

Claim 3 (Currently Amended): [[A]] The process as claimed in claim 1 ~~or 2~~, wherein the polymer particles of the colored polymer system comprise one type of particle.

Claim 4 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 3~~ claim 1, wherein the entirety of the emulsion polymer is composed of at least 40% by weight of what are known as main monomers, selected from the group consisting of C_1-C_{20}-alkyl (meth)acrylates, vinyl esters of carboxylic acids which contain up to 20 carbon atoms, vinylaromatics having up to 20 carbon atoms, ethylenically unsaturated nitriles, vinyl halides, vinyl ethers of alcohols which contain from 1 to 10 carbon atoms, aliphatic hydrocarbons having from 2 to 8 carbon atoms and one or two double bonds~~, or~~ and mixtures of these monomers.

Claim 5 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 4~~ claim 1, wherein the polymer particles of the colored polymer system and the matrix differ in refractive index.

Claim 6 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 5~~ claim 1, wherein the difference in refractive index is at least 0.01~~, in particular at least 0.1~~.

Claim 7 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 6~~ claim 1, wherein the polydispersity index of the discrete polymer particles is smaller than 0.45.

Claim 8 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 7~~ claim 1, wherein the core of the emulsion polymer has been crosslinked.

Claim 9 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 8~~ claim 1, wherein the core-to-shell weight ratio in the emulsion polymer is from 1:0.05 to 1:20.

Claim 10 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 9~~ claim 1, wherein the distance between the discrete polymer particles of the colored polymer layer is from 20 to 50 000 nanometers.

Claim 11 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 10~~ claim 1, wherein a transparent polymer layer is applied to the colored polymer system.

Claim 12 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 11~~ claim 1, wherein the entirety of the polymer of the transparent layer is composed of at least 40% by weight of what are known as main monomers, selected from the group consisting of C_1-C_{20}-alkyl (meth)acrylates, vinyl esters of carboxylic acids which contain up to 20 carbon atoms, vinylaromatics having up to 20 carbon atoms, ethylenically unsaturated nitriles, vinyl halides, vinyl ethers of alcohols which contain from 1 to 10 carbon atoms,

aliphatic hydrocarbons having from 2 to 8 carbon atoms and one or two double bonds~~, or~~ and mixtures of these monomers.

Claim 13 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 12~~ claim 1, wherein the polymer of the transparent layer is an emulsion polymer.

Claim 14 (Currently Amended): [[A]] The process as claimed in claim 13, wherein the emulsion polymer has a ponderal median particle diameter of from 10 to 500 nm~~, preferably from 30 to 200 nm~~.

Claim 15 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 14~~ claim 1, wherein the polymer of the transparent layer is applied in the form of a solution or dispersion to the colored layer, and a drying process then takes place.

Claim 16 (Currently Amended): [[A]] The process as claimed in ~~any of claims 1 to 15~~ claim 1, wherein the thickness of the transparent layer is from 0.2 to 500 μm.

Claim 17 (Currently Amended): A process for improving the brilliance of color and the stability of a colored polymer system, which is composed of a matrix and of discrete polymer particles distributed in accordance with a defined spatial lattice structure in the matrix, which comprises heating the colored polymer system and, ~~where appropriate~~ optionally, the transparent polymer layer to temperatures above 60°C.

Claim 18 (Currently Amended): A colored polymer system, ~~obtainable~~ obtained by a process as claimed in ~~any of claims 1 to 17~~ claim 1.

Claim 19 (Canceled).

Claim 20 (New): The process as claimed in claim 1, wherein the difference in refractive index is at least 0.1.

Claim 21 (New): The process as claimed in claim 13, wherein the emulsion polymer has a ponderal median particle diameter of from 30 to 200 nm.

Claim 22 (New): A method of coating a composition comprising coating the composition with the colored polymer system as claimed in claim 18.

Claim 23 (New): The method as claimed in claim 22, wherein the composition is plastic, plastic film, paper, packaging or a visual display.

Claim 24 (New): A coated composition wherein the coated composition is coated by the method as claimed in claim 22.